



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,404	10/20/2003	Tzyy-Shuh Chang		3455

7590 02/25/2005

OG Technologies, Inc.  
Attn: Tzyy-Shuh Chang  
Suite 200  
58 Parkland Plaza  
Ann Arbor, MI 48106-1778

EXAMINER
----------

ALSOMIRI, ISAM A

ART UNIT	PAPER NUMBER
----------	--------------

3662

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**RECEIVED**

MAR 24 2005

**GROUP 3600**

## Office Action Summary

**Application No.**

10/689,404

**Applicant(s)**

CHANG, TZYY-SHUH

**Examiner**

Isam A Alsomiri

**Art Unit**

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by the claimed "The Prescribed Method". It appears that claims 5-7 should depend on claim 1 (where the claimed prescribed method is explained), if so; applicant should claim the dependency (like claims 2-4).

Claims 5-7 recites the limitation "The Prescribed Method". There is insufficient antecedent basis for this limitation in the claims.

Claim 1 recites the limitation "said measurement" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Throughout the claims the limitations "can be" or "may be used", these terms are indefinite, when it said can be used, can it also be cannot be used. Applicant should use clear limitations.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 5-8 are rejected under 35 U.S.C. 102(a) as being anticipated by Hyakutake et al. US 6,412,322. Re claim s 5-8, Hyakutake discloses in figure 1 a system comprising an image capturing device (CCD camera) for imaging the said object; an image processing unit (controller) for processing the images captured from the said object, wherein the said image processing unit processes the images based on a Prescribed Method (see Abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyakutake et al. US 6,412,322. Hyakutake teaches using CCD camera, but does not mention using a CMOS camera. However, CMOS cameras are very well known, and it would have been obvious for Hyakutake to use CMOS camera instead for cost savings.

*Allowable Subject Matter*

Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 2-4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited to (Ebisu et al.; Takahashi; Kawano et al. '310; Morrison et al.; Kawano et al. '556) show various systems for detecting positions and/or velocity of objects using sequence of images.

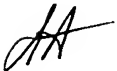
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam A Alsomiri whose telephone number is 703-305-5702. The examiner can normally be reached on Monday-Thursday and every other Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H Tarcza can be reached on 703-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



February 20, 2005



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

**Notice of References Cited**

Application/Control No.

10/689,404

Applicant(s)/Patent Under  
Reexamination  
CHANG, TZYY-SHUH

Examiner

Isam A Alsomiri

Art Unit

3662

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,744,512 B2	06-2004	Takahashi, Akira	356/401
	B	US-6,530,418 B2	03-2003	Ebisu et al.	164/502
	C	US-6,412,322 B1	07-2002	Hyakutake et al.	72/11.5
	D	US-6,385,556 B1	05-2002	Kawano et al.	702/155
	E	US-6,298,310 B1	10-2001	Kawano et al.	702/136
	F	US-5,033,096	07-1991	Morrison et al.	382/152
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	HATEBUR Metalforming Equipment Ltd, ESA 60 and ESA 600, << <a href="http://www.girard.cc/hatebur/products/hotmatics/AMP20_30/esa.php3">http://www.girard.cc/hatebur/products/hotmatics/AMP20_30/esa.php3</a> >>, 1 page.
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

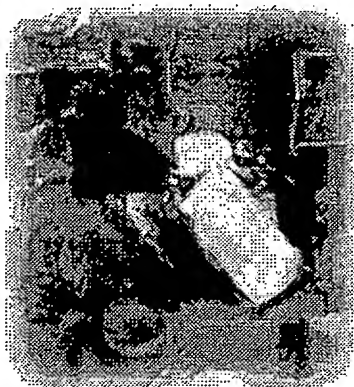
## ESA 60 / ESA 600 -- Dependable Elimination of Bar Ends

### ESA 60 (Amp 20 Only)

Three laser light barriers scan the bars as they move through the induction heater and report the passage of hte bar-to-bar transition point. The distance between the light barriers serves as the 'yard-stick'.

Based on the light barrier pulses, the ESA computer calculates the cutoff length and remaining distance to be travelled by the bar ends.

At the right instant it opens the feed rolls to admit the new bar and then lets the bar ends drop by opening the cutoff holding finger at the shearing station.

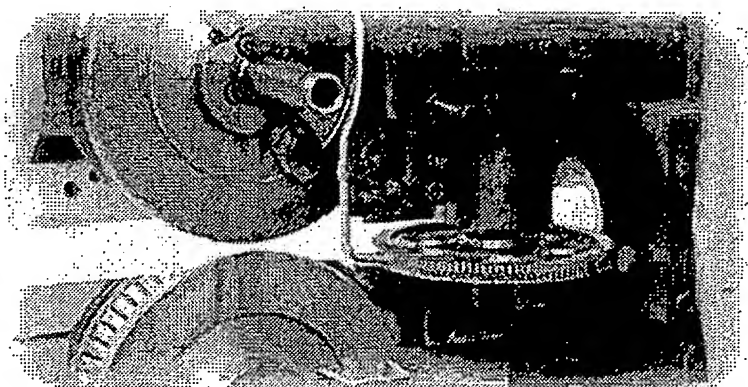


### ESA 600

With the ESA 600 version, the computer again receives reports from the three light barriers when the bar ends pass by.

But it tracks their further progress, stroke for stroke, with a measuring wheel pressed against the bar (see below); the roller's turns are communicated to the computer by a rotary transmitter on the wheel.

Thus all factors that could distrub the bar's movement are taken into account, e.g. momentary hang-up of the bar, bits of material sticking to the cutter blade or the bar stop, or hindering of the infeed stroke by a burr on the moving blade.



### Improves Reliability

The ESA control monitors the feeding of the bar stock and triggers automatic dropping of the bar ends at the Hotmatic's shearing station – because bar ends have less than full volume and can cause incomplete forgings and even tool breakage if they reach the forming stations.

ESA 60 and ESA 600 control this process so precisely and reliably that the amount of scrap caused by the dropping of 'safety cutoffs' is reduced – in the case of ESA 600 to nearly zero.

**BACK TO AMP 20S and AMP 30S MAIN PAGE <<<<<<<<<**